



RECEIVED
OPPT NCIC

8EHQ-1196-13799

The Dow Chemical Company
Midland, Michigan 48674

2030 DOW CENTER
November 1, 1996

96 NOV -8 PM 3: 03



8EHQ-96-13799

CERTIFIED MAIL--RETURN RECEIPT
REQUESTED

CONTAINS NO CONFIDENTIAL
BUSINESS INFORMATION

Document Processing Center (TS-790)
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460
Attn: 8(e) Coordinator

Contains No CBI

Re: Perchloroethylene, CASN 127-18-4
Trichloroethylene, CASN 71-01-6

Dear Sir/Madam:

The following information is being submitted by The Dow Chemical Company (Dow) pursuant to current guidance issued by EPA indicating EPA's interpretation of Section 8(e) of the Toxic Substance Control Act. Dow has made no determination as to whether a significant risk of injury to health or the environment is actually presented by the findings.

The enclosed abstract of a presentation to be made at the American College of Rheumatology meeting has recently come to the attention of Dow.

No further information on this presentation is available to Dow at this time.

Sincerely,

Paul A. Wright
Senior Attorney
Legal Department
517/636-1853



8897000049

RECEIVED
OPPT NCIC
96 NOV 15 AM 11:34

enclosure

CONNECTIVE TISSUE DISEASE IN PEOPLE EXPOSED TO ORGANIC CHEMICAL SOLVENTS: SYSTEMIC SCLEROSIS (SCLERODERMA) IN DRY CLEANING PLANT AND AIRCRAFT INDUSTRY WORKERS. John A. Goldman, Emory University School of Medicine, Atlanta, GA 30342.

This study investigates the relationship of environmental organic solvent exposure and the presence of connective tissue disease. Two hundred and seventy-nine consecutive patients with various connective tissue diseases were classified according to the American College of Rheumatology criteria for systemic lupus erythematosus, systemic sclerosis (scleroderma), and rheumatoid arthritis and clinically as dermatomyositis/polymyositis, mixed connective tissue disease and Sjogren's Syndrome. Comprehensive questionnaires were used regarding diagnosis, occupational history and chemical and other substance exposure. The data was then collected and statistically analyzed using two-tailed p-values.

There is a striking increase in exposure to organic chemical solvents in the population of people with systemic sclerosis. Twelve of 33 with scleroderma gave a history of organic chemical exposure versus twenty-two of the other 246 people ($p=.00011$); three were exposed to perchloroethylene versus two of 246 ($p=.00076$); two to trichloroethylene versus one of 246 ($p=.0031$); and two each to petroleum solvent and fluorocarbon solvent versus zero of 246 ($p=.00011$) for each. Four of these scleroderma patients worked in dry cleaning plants versus one of the other 246 ($p<.00001$) and two worked cleaning airplane parts versus two of the other 246 ($p=.00076$).

These observations support a hypothesis for a role of occupational exposure in some patients with scleroderma. Prospective epidemiological studies are needed. Clinicians should question new patients about such exposures and may wish to counsel them about avoiding exposures. However no data have yet suggested that stopping the exposures made patients better.

Best Available Copy